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ABSTRACT

The document reports on the 1974-75 statewide field test of 13 Arizona-developed career education units; it contains unit-specific implementation data. The units were implemented in 10 projects in different parts of Arizona in order to determine their usability in classrooms throughout the State; units meeting all implementation criteria were then considered ready for large-scale dissemination. Tested were one unit each for grades K, 1, and 2; four units for grade 5; two units for grade 6; and three units for grades 7/8. The document is divided into 13 sections, each devoted to an analysis of an individual unit. The format includes:unit description; student demographic data; number of hours devoted to teaching the unit; teaching sequence of lessons; data on perceived unit effectiveness, teacher attitude, and student attitude, presented in tabular form by project; necessary correlation tables; lessons omitted; teacher comments; and recommendations. The data analyzed was from approximately 11,000 students and 331 teachers. Demographic information was analyzed and correlated with other data. (AJ)

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IMPLEMENTATION REPORT
Vol. 2
INDIVIDUAL UNIT REPORTS

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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ARIZONA STATEWIDE IMPLEMENTATION 1974-75

Conducted by
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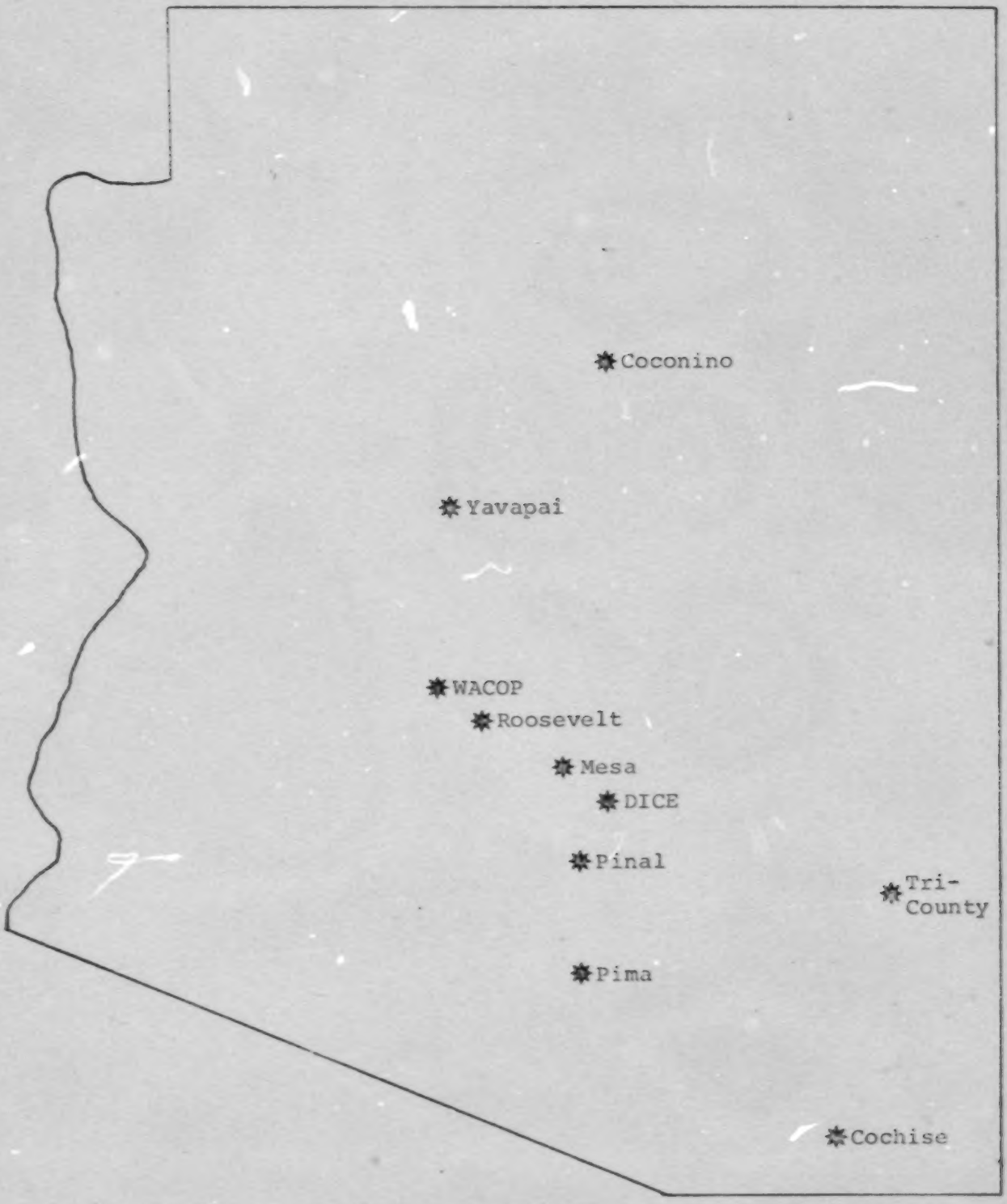
GOAL 18A

A STATEWIDE UNIFIED
ASSESSMENT OF THE IMPLEMENTATION
CAREER EDUCATION UNITS



FOREWORD

So many have contributed major input to the implementation processes of unit delivery, monitoring and instrument completion that it is impossible to extract, note, and applaud individual efforts. I am sure that all those involved in this major team effort can see how much has been accomplished and have a positive view of its educational significance for the young people of Arizona. By documenting and analyzing the capabilities of the career education units tested, we all have contributed a positive boost to career education in school districts across the state.

The task of Implementation Manager has been simplified considerably by excellent staff support from the Mesa Public Schools Department of Research and Evaluation, responsive assistance from the State Department of Education, and the effective management shown by the implementation coordinators from the respective implementation projects.

Frank Leo Vicino
Implementation Manager

JUNE, 1975

STATEWIDE IMPLEMENTATION TASK FORCE

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PREFACE

This is one of two implementation reports on Arizona developed Career Education Curriculum Units. This report presents information concerning overall implementation rationale and compilation of results for all implemented units. The second report in this series contains unit specific implementation material.

The work presented and reported herein was performed pursuant to contract from the Arizona State Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the Arizona State Department of Education and no official endorsement by the Arizona State Department of Education should be inferred.

The following sections of this report will be devoted to an analysis of the individual units. Included in the analysis will be the following:

1. Unit description.
2. Student demographic data.
3. Number of hours devoted to teaching the unit.
4. Teaching sequence of lessons.
5. Table showing perceived unit effectiveness, teacher attitude and student attitude by project.
6. Necessary correlation tables.
7. Lessons omitted.
8. Unit comments.
9. Recommendations.

The following 13 career education instructional units were used in the implementation process and the reports for each follow:

1. Tools for Toil
2. Reading, Writing and Numbering
3. What Do Workers Do?
4. Doing Your Thing
5. Developing Your Potential
6. Future Me
7. Following and Giving Directions
8. Skill Schemes
9. Ideas, Things to Think About
10. Look to Learning

11. Careers Calling

12. Composition of Business Letters

13. Then and Now

TABLE OF CONTENTS

Section	
1	Tools For Toil
2	Reading, Writing and Numbering
3	What Do Workers Do?
4	Doing Your Thing
5	Developing Your Potential
6	Future Me
7	Following and Giving Directions
8	Ideas: Things to Think About
9	Skill Schemes
10	Look to Learning
11	Careers Calling
12	Then and Now
13	Composition of Business Letters

SECTION 1

Tools for Toil

TOOLS FOR TOIL

Kindergarten

Unit Description

The primary intent of this kindergarten unit is to create an awareness of the wide variety of tools, equipment, and materials used in the world of work. It is also intended to acquaint the learner with the early conception and development of tools and to promote an understanding of the need for tools and how they have increased man's efficiency, skillfulness, and productivity. The learner is encouraged to envision himself as a worker, using tools, equipment, and materials in his job, in the classroom setting and at home.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners, and projects described below.

A. Student Demographic Information

A total of 1609 learners were exposed to the unit, Tools for Toil; of these learners, 188 (12%) were bilingual. In addition, 30% of the students were from minority back-

grounds (6% American Indian, 7% Black, 16% Spanish Surname, and 1% Other) while the remaining 70% were Anglo students. (See Table I.)

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 23 (52%) of the classrooms, the teachers devoted 1-2 hours per week. Thirty percent (30%) of the teachers devoted less than one hour per week while the remaining 19% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g., taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However, a lesson may be given out of order to meet the needs of the class, e.g., lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs

TABLE I

UNIT 01

NUMBER OF LEARNERS EXPOSED BY SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise	180	174	94(27%)	1(1%)	7(2%)	136(38%)	204(58%)	4(1%)	354
Coconino	77	55	40(30%)	44(33%)	9(7%)	12(9%)	67(51%)	0(0%)	132
DICE	55	44	2(2%)	0(0%)	0(0%)	7(7%)	92(93%)	0(0%)	99
Mesa	171	147	2(1%)	6(2%)	3(1%)	23(7%)	286(89%)	0(0%)	318
Pima	134	143	37(13%)	27(10%)	4(1%)	29(10%)	217(78%)	0(0%)	277
[illegible]	30	25	0(0%)	2(4%)	2(4%)	24(44%)	27(49%)	0(0%)	55
Roosevelt	54	41	3(3%)	0(0%)	81(85%)	7(7%)	7(7%)	0(0%)	95
Tri-County	47	56	10(10%)	10(10%)	1(1%)	24(23%)	67(65%)	1(1%)	103
WACOP	72	77	0(0%)	0(0%)	1(1%)	1(1%)	147(98%)	0(0%)	149
Yavapai	14	13	0(0%)	2(7%)	0(0%)	3(11%)	22(81%)	0(0%)	27
Total	834	775	188	92	108	266	1136	5	1609
Percent			12%	6%	7%	16%	70%	1%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 01 Tools for Toil

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise	5	46	6	55						
Coconino	1	25	2	5			1	25		
DICE	1	100								
Mesa			7	7	2	22				
Pima	3	38	2	25	2	25	1	13		
Pinal	2	100								
Roosevelt			1	50	1	50				
Tri-County	1	33	2	67						
WACOP			1	50	1	50				
Yavapai			2	100						
TOTALS	13	30	23	52	6	14	2	5		

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 01 Tools for Toil

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise	4	36	6	55	1	9
Coconino	2	50	1	25	1	25
Dice					1	100
Mesa	4	45	2	22	3	33
Pima	3	38	4	50	1	12
Pinal			2	100		
Roosevelt	2	100				
Tri-County	1	33	1	33	1	33
WACOP	2	100				
Yavapai	2	100				
TOTAL	20	46	16	36	8	18

of the class. Eighty-two percent (82%) of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teachers' attitude toward the unit Tools for Toil was positive (3.95 on a scale where 5 was most positive and 1 most negative) while the students' attitude was a more positive 4.11 on the same scale. The teachers perceived this unit to be moderately effective 2.45 (on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

There is a positive correlation between Learner Attitude toward the unit and Teacher Attitude toward the unit. This indicates that a positive attitude on the part of the teachers is reflected in the positive attitude of the students.

F. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit: 01 Tools for Toil

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Ceechino	N	3	1					3	1					2	2		
	%	75	25				4.75	75	25				4.75	50	50		2.50
Cochise	N	2	5	4				3	5	2	1			6	5		
	%	18	45	36			3.82	27	45	18	10		3.91	55	45		2.55
DICE	N		1						1					1			
	%						4.00						4.00	100			3.00
Mesa	N	2	4	1	2				4	2	3			3	5	1	
	%	22	44	11	22		3.67		44	22	33		3.11	33	56	11	2.22
Pima	N	2	6					2	5	1				3	5		
	%	25	75				4.25	25	62	13			4.12	37	63		2.37
Pinal	N	2						1	1					2			
	%	100					5.00	50	50				4.50	100			3.00
Shoreveiw	N		2						2					1	1		
	%		100				4.00		100				4.00	50	50		2.50
Wapiguro	N	2			1				3					1	2		
	%	67			33		4.00		100				4.00	33	67		2.33
Wilcox	N	1	1						2					1	1		
	%	50	50				4.50		100				4.00	50	50		2.50
Yavapai	N	2						2						1	1		
	%	100					5.00	100					5.00	50	50		2.50
TOTALS	N	16	20	5	3	0	~~Sub= 5~~	11	24	5	4	0		21	22	1	~~Scale = 3~~
	%	36	45	11	7	0	~~4.11~~	25	55	11	9	0	3.95	48	50	2	~~2.45~~

TABLE V
CORRELATION MATRIX

N=44 Unit 1	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		- .0880	.0865	.1356	.2912	.2799
Time Devoted to Unit			.2260	- .2769	.1321	.0455
Sequence Taught				- .2562	.0550	- .0481
Teacher's Previous Unit Experience					.2687	.1300
Teacher Attitude						.6599
Learner Attitude						

Significance level r=.298@.05

the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

TOOLS FOR TOIL
(Teacher Comments)
GRADE K

ERRATA SHEET

PINAL Limited the lesson to actual tools and how they are used. The historical aspect was not applicable. It was a good unit, good activities. The questions were changed to open ended.

PIMA Lessons are too long for one sitting. I like the activities. Divided lesson one into 3 parts. In lesson 3, tagboard makes a sturdier magnifying glass. Eliminated shoe boxes in lesson 4 because many supplies are shared. Riddles in lesson 3 very effective. Lesson 6 take home booklets were different. The Balloon Man was the hit of the unit. Lesson 5 - not necessary to visit many school workers who are seen every day. The visual aids were poor and were not used. Children like the idea that their work is important too and scissors, crayons, etc. are tools. 265 pages was overwhelming. Children enjoyed working with the tools and talking about the various tools for different jobs. The children didn't understand the section on prehistoric tools. Pictures could be improved. Shoe boxes not necessary. A great time to have parents and community workers share their jobs. Better at first of year. Too much preparation time.

A problem to schedule 12 sessions. The activity with each lesson was enjoyed. The format is easily followed.

COCONINO — Color pictures would be more interesting. Most fun when tools were actually used by the children. Twenty percent error rate on assessment items.

DICE — Lesson 4 done without shoe boxes. Works best with small groups. Materials and drawings very helpful. Lessons 1 and 5 are too long and extensive for children. Manipulation lessons with art were best.

ROOSEVELT — Pictures were very poor quality. Hard to tell what was in the picture - paintbrush in picture of Jerry, Unit 4; mailman, Unit 1, kids thought he was mowing the lawn! Picture of Detective Dan was good. Lessons need to be further developed before assessing. Kids do not understand a concept after one exposure to it. Too many other things to do. Pictures in lesson 1 were not suitable, difficult to see what was being shown. Divided first lesson. Sex stereotyped job - only female was a student.

WACOP — Lesson 8 pictures couldn't portray consequences. Detective Dan picture was good, others poor.

YAVAPAI — Students did not understand about the stupid caveman not using tools we now have. Should trace back the development of the tools. Children enjoy the activities.

MESA — Concepts like the caveman are very hard to get the students to understand. Lesson 8 pictures were extremely hard to interpret. The assessment items were not valid. The pictures were poor and uninteresting. The children were delighted with the balloon man, Timothy O'Toole. Need more physical movement, more games or involvement. Give students pictures that need partners, etc. Assessment items are not well arranged. The unit was dropped after lesson 1 because the children were bored and materials were uninteresting. Provide more maths, filmstrips, speakers. Not appropriate for this level of children. The unit was well laid out as long as it can be used in a sequence. In lesson 5, students not interested enough to spend 30 minutes with each school helper. Children especially enjoyed lesson 7 and finding tools at their homes. Lesson 1, the caveman, was

unnecessary concept.

COCHISE Would prefer the unit in kit form with hammer, nails, wood, etc. A bilingual class omitted caveman concept, Detective Dan. Many parts of the lessons were not geared to Mexican-American children. Some lessons did not apply to the socio-economic group. Very happy with unit, very good lessons. The unit was well planned and most useful for Spanish speaking students as an aid to supplement their vocabulary. The unit was well planned. There are so many other areas that must be covered and are more important than career ed. This will be covered more fully in first grade. Activities are too simple, no thought required, not challenging. Would have liked dittos.

TRI-COUNTY Last half better than the first half. The pictures could have been clearer. Indian class wasn't interested. If it isn't entertaining their interest is lost. The first section doesn't relate to anything Indians have experienced.

SUMMARY

This unit, Tools for Toil, received a positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teachers' attitude toward the unit was a positive 3.95. On the same scale the students' attitude was an even more positive 4.11.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.45.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is now ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

APPENDIX I

Non-Significant Data

Table VI

Number and Percent of Lessons Omitted. Total Units Taught 44

UNIT # 1 , Tools for Toil

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O						1	1							
	N														
Coconino	O					1									
	N														
DICE	O		1	1			1	1	1						
	N														
Mesa	O	1	2	2	2	4	2	2	2						
	N	1	2	2	2	2	2	2	2						
Pima	O		1	1	1	3	1	2							
	N														
Pinal	O	1						1							
	N	1													
Roosevelt	O				1	2	2	1	1						
	N														
Tri-County	O				1										
	N														
WACOP	O														
	N														
Yavapai	O		1												
	N														
TOTALS	O	2	5	4	5	10	7	8	4						
	N	2	2	2	2	2	2	2	2						
OMISSION RATE(%)	O	4	10	8	10	21	14	16	8						
	N	4	4	4	4	4	4	4	4						

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 2

Reading, Writing and Numbering

READING, WRITING AND NUMBERING

GRADE 1

Unit Description

The overall purpose of this first grade unit is to help the learner understand the importance of developing those skills that will enable him to meet the ever increasing demands of the world around him. By taking a closer look at those basic skills he and others use in schools, at home, and at work, the learner becomes aware of the fact that the skills he is acquiring in school are relevant to those required in everyday life.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and project described below.

A. Student Demographic Information

A total of 1687 learners were exposed to the unit, Reading, Writing and Numbering; of these learners, 314 (19%) were bilingual. In addition, 35% of the students were from minority backgrounds (5% American Indian, 5% Black, 24% Spanish Surname, and 1% Other) while the remaining 65% were Anglo students. (See Table I.)

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 31 (53%) of the classrooms, the teachers devoted 1-2 hours per week. Thirty-two percent (32%) of the teachers devoted less than one hour per week while the remaining 15% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g., taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However, a lesson may be given out of order to meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Seventy-one percent of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher

Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. the teachers' attitude toward the unit Reading, Writing and Numbering was positive (3.98 on a scale where 5 was most positive and 1 most negative) while the students' attitude was only slightly more positive at 4.00 on the same scale. The teachers perceived this unit to be moderately effective 2.37 (on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

1. Perceived Unit Effectiveness and Sequence Taught
2. Perceived Unit Effectiveness and Teacher Attitude
3. Perceived Unit Effectiveness and Learner Attitude
4. Time Devoted to Unit and Sequence Taught
5. Sequence Taught and Teacher Attitude
6. Sequence Taught and Learner Attitude
7. Teacher Attitude and Learner Attitude

Teachers that perceived the unit to be most effective tended to teach the unit in sequence. When more time was

devoted to teaching the unit the more likely it was that the unit would be taught in sequence.

Negative correlations were found between the following variables:

1. Time Devoted to the Unit and Teachers' Previous Unit Experience
2. Sequence Taught and Teachers Previous Unit Experience
3. Teachers Previous Unit Experience and Learner Attitude

This indicates that if a teacher had not previously done a unit he/she would tend to devote more time to the unit, teach it more in sequence and the learners' attitude would be more positive.

F. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases on comments were made by the teachers involved in implementation.

READING, WRITING AND NUMBERING
(Teacher Comments)
(GRADE 1)

ROOSEVELT — Good for beginning of 1st or end of kindergarten. Lesson 2 was too easy. Unit's objectives are applicable when brought to a higher level. End of kindergarten or beginning of 1st.

DICE — No time

YAVAPAI — Inappropriate at this grade level after November. Left out lessons 1-3 as too easy. Better for kindergarten. Too far ahead for 1st so used it in kindergarten. Kindergarten enjoyed number bingo. Fun activity for kindergarten age group in latter part of the year. Learner assessment not valid if not in sequence.

WACOP — All but lessons 5 and 6 were too elementary. Rest is for kindergarten at this time of year. Skimmed over easy lessons. Give it in September. It was boring because we have Reading, Writing and Numbering every day.

TRI-COUNTY — Use the unit the first 2-3 weeks of school. Students enjoyed the activities. Lessons 4-8 were the most challenging and valuable. Master dittos need to be supplied. Used lesson 5 in second grade. Children enjoyed

all of the dittos. The students had fun and it reinforced the number concept. An excellent unit, especially with worksheets provided and related to the outside world. Children enjoyed bingo. Skittle cards were too easy. Much was repetitious and beyond the class needs. Best be used at first of year with any 1st grade.

PIMA

Reading unit enjoyed and excellent. Take Care of Me booklet should not be in all capital letters. It would be very effective at the beginning of the year. For immature students or beginning of the year. Reading and Numbering parts are readiness level. The writing activity belongs in an advanced part of the year. The overall objective of lessons 1, 2, 3 cannot be met because those activities are at such different levels that they could not be used at the same time with the same children. Children too far advanced. Animal Name signs and Joey's Surprise and the Five Candled Cake P259 are kindergarten level. Far too much time is expected to make the Skiddle Poster Patterns. The letter pattern address should be printed, not

written in cursive. P248, hour hand is in incorrect place. P211, elephant is not a good choice for beginning sounds for 1st semester.

PINAL

Lesson 2, too simple. Too elementary for students, Reading and Writing lessons were good. Adapted well to learning center activities. Would be excellent for review in learning centers.

COCHISE

Too easy for the class at time received. Can use some of the pictures. Unit contains too much for 25-30 first grade children. Good pictures supplemental resources (sign post patterns, etc.) very good. Please Care for Me was good. Get unit out at beginning of the year. Enjoyed Zoo Animals. Excellent supplementary material, especially for beginning of year. Very good--could be used easily in interest centers. Most effective first of year.

MESA

1, 2, 3, are too easy. Bingo game in lesson 3 was good. Lesson 6 - Zoo Animals were rated tops. Clocks were greatly enjoyed-Lesson 8. Will use unit again next year.

COCONINO

Much too simple-Spring. Abbreviated 1, 2, 3. Used the unit for review. Students enjoyed the unit very much. Class enjoyed it. Material was easy. Very good for developing learning centers. Implemented a tele-trainer into the telephone lesson.

SUMMARY

This unit, Reading, Writing and Numbering, received a positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teachers' attitude toward the unit was a positive 3.98. On the same scale the students' attitude was slightly more positive at 4.00.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.37.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

TABLE I

UNIT 02

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise	272	274	147(27%)	1(1%)	14(3%)	198(36%)	327(59%)	6(1%)	546
Coconino	66	70	57(42%)	55(40%)	4(3%)	9(7%)	67(49%)	1(1%)	136
DICE	23	23	4(9%)	0(0%)	2(4%)	6(13%)	38(83%)	0(0%)	46
Mesa	124	99	14(6%)	4(2%)	4(2%)	22(10%)	192(86%)	1(1%)	223
Pima	51	40	30(33%)	20(22%)	0(0%)	8(9%)	62(68%)	1(1%)	91
Pinal	40	32	25(35%)	2(3%)	6(8%)	36(50%)	28(39%)	0(0%)	72
Roosevelt	26	35	4(7%)	0(0%)	45(74%)	4(7%)	12(19%)	0(0%)	61
Tri-County	154	168	33(10%)	1(1%)	7(2%)	106(33%)	207(64%)	1(1%)	322
WACOP	75	83	0(0%)	1(1%)	0(0%)	7(4%)	150(45%)	0(0%)	158
Yavapai	16	16	0(0%)	0(0%)	0(0%)	3(9%)	29(91%)	0(0%)	32
Total	847	840	314	84	82	399	1112	10	1687
Percent			19%	5%	5%	24%	65%	1%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 02 Reading, Writing and Numbering

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise			3	60	1	20	1	20		
Coconino			3	60	1	20	1	20		
DICE					1	100				
Mesa	1	20	2	40	1	20	1	20		
Pima			4	60	1	20				
Pinal			3	100						
Roosevelt			2	100						
Tri-County	3	30	6	60	1	10				
WACOP			2	67			1	33		
Yavapai	1	50			1	50				
TOTALS	19	32	31	53	6	10	3	5		

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 02 Reading, Writing & Numbering

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise	1	4	13	57	9	39
Coconino	2	40	3	60		
Dice			1	100		
Mesa	2	40	2	40	1	20
Pima	1	20	3	60	1	20
Pinal			2	67	1	33
Roosevelt			2	100		
Tri-County	2	20	5	50	3	30
WACOP	1	33			2	67
Yavapai						
TOTAL	9	15	33	56	17	29

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 02 Reading, Writing and Numbering

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Coconino	N	2	2	1				1	3		1			3	2		
	%	40	40	20			4.20	20	60		20		3.8	60	40		2.60
Cochise	N	6	8	7	2			7	9	3	3	1		9	12	2	
	%	26	35	38	9		3.78	31	39	13	13	4	3.78	39	52	9	2.30
DICE	N			1						1					1		
	%			100			3.00			100			3.00		100		2.00
Mesa	N	4	1					2	3					4	1		
	%	80	20				4.80	40	60				4.40	80	20		2.80
Pima	N	1	3	1				1	3		1			1	4		
	%	20	60	20			4.00	20	60		20		3.80	20	80		2.20
Pinal	N	1	2					1	2					2		1	
	%	33	67				4.33	33	67				4.33	67		33	2.33
Roosevelt	N		2						2					2			
	%		100				4.00		100				4.00	100			3.00
Tri-County	N	2	8					3	7					5	4	1	
	%	20	80				4.20	30	70				4.30	50	40	10	2.40
WACOP	N			3					3						3		
	%			100			3.00		100				4.00		100		2.00
Yavapai	N	1	1					1	1					1		1	
	%	50	50				4.50	50	50				4.50	50		50	2.00
TOTALS	N	17	27	13	2	0		16	33	4	5	1		27	27	5	
	%	29	46	22	3	0	4.00	27	56	7	8	2	3.98	46	46	8	2.37

TABLE V
CORRELATION MATRIX

N=58 Unit 2	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		.1592	.2784	-.0322	.5381	.5957
Time Devoted to Unit			.4790	-.4105	.0774	.1674
Sequence Taught				-.3267	.2767	.4390
Teacher's Previous Unit Experience					-.0643	-.2763
Teacher Attitude						.7351
Learner Attitude						

Significance level r=.260 @ .05

APPENDIX I

Non-Significant Data

Table VI

Number and Percent of Lessons Omitted. Total Units Taught 63

UNIT # 2 , Reading, Writing and Numbering

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O	1	2	2	2	3	4	4	4						
	N		1	1		1	1	1	1						
Coconino	O			1											
	N														
DICE	O	1	1		1	1	1		1						
	N														
Mesa	O														
	N														
Pima	O			1		1	1	1	1						
	N			1											
Pinal	O		1	1	1	1	1	1	1						
	N		1												
Roosevelt	O		1					1	1						
	N		1												
Tri-County	O	3	2	1	2	2	4	2	2						
	N	1				1	3								
WACOP	O	1	2	1	1			1	1						
	N	1	1	1	1			1	1						
Yavapai	O	1	2	1											
	N		1												
TOTALS	O	7	11	8	7	8	11	10	10						
	N	2	5	3	1	2	4	2	2						
OMISSION RATE(%)	O	11	17	13	11	13	17	16	16						
	N	3	8	5	1	3	6	3	3						

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 3

What Do Workers Do?

WHAT DO WORKERS DO?

GRADE 2

Unit Description

The primary intent of this second grade unit is to help learners understand that tasks performed in the home, occupational, and school setting are often interdependent. This interdependency appears among family members, within different occupations, and throughout governmental agencies. The last few objectives are concerned with workers attaining success through planning, preparing, and practicing tasks.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 1102 learners were exposed to the unit, What Do Workers Do?; of these learners, 116 (10%) were bilingual. In addition, 30% of the students were from minority backgrounds (10% American Indian, 6% Black, 13% Spanish Surname, and 1% Other) while the remaining 70% were Anglo students. (See Table I.)

TABLE I

UNIT 03

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise									
Coconino	85	85	32(19%)	42(25%)	9(5%)	20(12%)	99(58%)	0(0%)	170
DICE	12	12	0(0%)	0(0%)	0(0%)	1(4%)	21(88%)	2(8%)	24
Mesa	116	113	9(4%)	20(9%)	2(1%)	14(6%)	193(84%)	0(0%)	229
Pima	136	103	35(15%)	21(9%)	6(3%)	36(15%)	173(72%)	3(1%)	239
Pinal	25	22	5(11%)	4(8%)	0(0%)	28(60%)	15(32%)	0(0%)	47
Roosevelt	31	32	4(6%)	0(0%)	52(82%)	8(13%)	3(5%)	0(0%)	63
Tri-County	42	60	27(26%)	23(22%)	0(0%)	21(21%)	57(56%)	1(1%)	102
WACOP	68	71	1(1%)	1(1%)	0(0%)	2(1%)	135(97%)	1(1%)	139
Yavapai	45	44	3(3%)	3(3%)	0(0%)	8(9%)	77(87%)	1(1%)	89
Total	560	542	116	114	69	138	773	8	1102
Percent			10%	10%	6%	13%	70%	1%	
State Average				6%	4%	20%	69%	1%	

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 25 (61%) of the classrooms, the teachers devoted 1-2 hours per week. Thirteen percent (13%) of the teachers devoted less than one hour per week while the remaining 27% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g. taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the orther presented. However a lesson may be given out of order to meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9 and 10.

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 03 What Do Workers Do?

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise										
Coconino	1	17	4	67	1	17				
DICE			1	100						
Mesa	2	25	3	38	1	13	2	25		
Pima	1	13	6	75			1	13		
Pinal	1	50	1	50						
Roosevelt			1	50	1	50				
Tri-County			2	50	1	25	1	25		
WACOP			3	100						
Yavapai			2	50	2	50				
TOTALS	5	13	25	61	6	16	4	11		

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 03 What Do Workers Do?

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise						
Coconino	2	33	4	77		
Dice	1	100				
Mesa	3	38	4	50	1	12
Pima	3	38	4	50	1	12
Pinal			2	100		
Roosevelt	1	50	1	50		
Tri-County	2	50	2	50		
WACOP	3	100				
Yavapai	2	50	2	50		
TOTAL	17	45	19	50	2	5

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Ninety-five percent of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teachers' attitude toward the unit What Do Workers Do? was positive (4.00 on a scale where 5 was most positive and 1 was most negative) while the students' attitude was less though still positive at 3.89 on the same scale. The teachers perceived this unit to be moderately effective 2.34 (on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 03 What Do Workers Do?

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Coconino	N		6					1	5					2	4		
	%		100				4.00	17	83				4.17	33	67		2.33
Cochise	N																
	%																
DICE	N			1						1					1		
	%			100			3.00			100			3.00		100		2.00
Mesa	N	2	2	2	2			2	5		1			3	5		
	%	25	25	25	25		3.50	25	63		12		4.00	38	62		2.37
Pima	N	1	5	2					6	2							
	%	12	62	25			3.88		75	25			3.75	12.5	87.5		2.12
Pinal	N	1	1					1	1					1	1		
	%	50	50				4.50	50	50				4.50	50	50		2.50
Pendrell	N	1	1						2					1	1		
	%	50	50				4.50		100				4.00	50	50		2.50
Tri-County	N		4					2	2					2	2		
	%		100				4.00	50	50				3.50	50	50		2.50
Willcox	N		3						3					1	2		
	%		100				4.00		100				4.00	33	67		2.33
Yavapai	N		4						3	1				2	2		
	%		100				4.00		75	25			3.75	50	50		2.50
TOTALS	N	5	26	5	2	0		6	27	4	1	0		13	25		
	%	13	68	13	6	0	3.89	16	71	11	3	0	4.00	34	66		2.34

TABLE V
CORRELATION MATRIX

N=38 Unit 3	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		.2003	.0821	.0666	.5483	.4378
Time Devoted to Unit			.0248	-.0056	-.1072	.0453
Sequence Taught				-.0615	-.0739	-.1597
Teacher's Previous Unit Experience					.1413	.0730
Teacher Attitude						.5737
Learner Attitude						

Significance level r=.329 @ .05

1. Perceived Unit Effectiveness and Teacher Attitude
2. Perceived Unit Effectiveness and Learner Attitude
3. Teacher Attitude and Learner Attitude

F. Teachers Comments

The teachers were asked to comment on various aspects of the units. Listed below are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

WHAT DO WORKERS DO?
(Teacher Comments)
GRADE 2

ROOSEVELT	Needs more pictures, end of lesson quizzes and film strips. Some group problem solving activities were too advanced.
TRI-COUNTY	Very good. Good way to introduce responsibilities to students required too much preliminary work.
PINAL	Good unit-good sequence
DICE	No comment.
PIMA	Needs supplementary texts. Bored the students. Lessons 8 and 9 repeat lessons 1, 2, and 3 lesson 5 too difficult for 2nd grade. Some concepts too difficult. Lesson 8 needs more material for reservation students. Good unit. Some material over their heads.
WACOP	Too repetitious in parts. Some material too difficult for students.
YAVAPAI	Good.
COCONINO	Filmstrips difficult to obtain. Shorten the lessons. Some lessons were too simple. Lesson 9 very similar to lesson 3. Evaluations at end of each lesson are useless.

MESA	Already covered in Kindergarten - 1st. Lessons 4 and 5 too difficult. Lessons 10 and 11 too difficult. Too long so eliminated last 5 lessons. Vocabulary too difficult. Shorter lessons. Assessment items ridiculous. Too long.
YAVAPAI	Vocabulary too difficult. Combine lessons 10 and 11. Eliminate lesson 1. Assessment items too easy.

SUMMARY

This unit, What Do Workers Do?, received a positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teacher attitude toward the unit was a positive 4.00. On the same scale the students' attitude was a positive 3.89.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.34.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for wide-spread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

APPENDIX I

Non-Significant Data

Table VI

Number and Percent of Lessons Omitted. Total Units Taught 37

UNIT # 3, What Do Workers Do?

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O														
	N														
Coconino	O		1				1			1		1			
	N		1							1					
DICE	O	1		1	1	1	1	1	1	1	1	1			
	N														
Mesa	O				1	1		1	1	1	3	4			
	N				1	1		1	1	1	2	2			
Pima	O				1	3	1					1			
	N				1	2	1					1			
Pinal	O														
	N														
Roosevelt	O					1	1			1					
	N														
Tri-County	O											2			
	N											2			
WACOP	O														
	N														
Yavapai	O					1						1			
	N														
TOTALS	O	1	1	1	3	6	4	2	2	4	4	10			
	N		1		2	3	1	1	1	2	2	5			
OMISSION RATE(%)	O	3	3	3	8	16	11	5	5	11	11	27			
	N	0	3	0	5	8	3	3	3	5	5	13			

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 4

Doing Your Thing

DOING YOUR THING

GRADE 4

Unit Description

The primary intent of this fourth grade unit is to develop career awareness of employability skills. Learners demonstrate the ability to participate in a group in order to facilitate the attainment of individual as well as group goals. The learners also are made aware of the responsibility involved in the completion of a task. Major topics include job specialization and dependence on others to complete a task.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 950 learners were exposed to the unit, Doing Your Thing; of these learners, 102 (11%) were bilingual. In addition, 24% of the students were from minority backgrounds (5% American Indian, 2% Black, 16% Spanish Surname, and 1% Other) while the remaining 76% were Anglo students. (See Table I.)

TABLE I

UNIT 04

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise									
Coconino	44	59	12(12%)	29(28%)	9(9%)	17(16%)	48(47%)	0(0%)	103
DICE	40	57	4(4%)	0(0%)	0(0%)	3(3%)	94(97%)	0(0%)	97
Mesa	238	178	18(4%)	12(3%)	2(1%)	34(8%)	368(88%)	0(0%)	416
Pima	26	29	5(9%)	2(4%)	0(0%)	27(49%)	26(47%)	0(0%)	55
Pinal	46	31	48(62%)	5(6%)	5(7%)	47(61%)	19(25%)	1(1%)	77
Roosevelt	15	11	15(58%)	0(0%)	5(19%)	15(58%)	6(23%)	1(0%)	26
Tri-County									
WACOP	80	74	0(0%)	1(1%)	0(0%)	5(3%)	148(96%)	0(0%)	154
Yavapai	13	9	0(0%)	0(0%)	0(0%)	4(18%)	18(82%)	0(0%)	22
Total	502	448	102	49	21	152	727	1	950
Percent			11%	5%	2%	16%	76%	1%	
State Average				6%	4%	20%	69%	1%	

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 14 (56%) of the classrooms, the teachers devoted 1-2 hours per week. Twelve percent (12%) of the teachers devoted less than one hour per week while the remaining 32% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g., taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However, a lesson may be given out of order to meet the needs of the class, e.g., lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. All of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 04 Doing Your Thing

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise										
Coconino			3	75					1	25
DICE							1	100		
Mesa	2	20	5	50			2	20	1	10
Pima	1	50	1	50						
Pinal			3	100						
Roosevelt					1	100				
Tri-County										
WACOP			2	67			1	33		
Yavapai					1	100				
TOTALS	3	12	14	56	2	8	4	16	2	8

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 04 Doing Your Thing

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise						
Coconino	2	50	2	50		
Dice	1	100				
Mesa	7	70	3	30		
Pima	1	50	1	50		
Pinal	1	33	2	77		
Roosevelt	1	100				
Tri-County						
WACOP	3	100				
Yavapai	1	100				
TOTAL	17	68	8	32		

Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other [illegible]s used in the implementation to determine the final uni[illegible] effectiveness ranking. The teachers' attitude toward the unit Doing Your Thing was positive (3.80 on a scale where 5 was most positive and 1 most negative) while the students' attitude was a very positive 4.20 on the same scale. The teachers perceived this unit to be moderately effective 2.[illegible]8 (on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

1. Perceived Unit Effectiveness and Learner Attitude
2. Teacher Attitude and Learner Attitude

F. Number and Percent Of Lessons Omitted

Examining Table VI we see that a high percentage of teachers eliminated lessons 5, 6, and 7. However, there was only one negative remark for the three lessons. They most probably were eliminated because the lessons were the last three and the implementation year was running out.

G. Teacher Comments

The teachers were asked to comment on various aspects

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 04 Doing Your Thing

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Coconino	N	2	2					2	1	1				2	2		
	%	50	50				4.50	50	25	25			4.25	50	50		2.50
Cochise	N																
	%																
DICE	N		1					1						1			
	%		100				4.00	100					5.00	100			3.00
Mesa	N	2	7		1			2	5		3			1	8	1	
	%	20	70		10		4.00	20	50		30		3.60	10	80	10	2.00
Pima	N		1	1										1	1		
	%		50	50			3.50							50	50		2.50
Pinal	N	2	1					3						3			
	%	67	33				4.67	100					5.00	100			3.00
Roosevelt	N	1							1					1			
	%	100					5.00		100				4.00	100			3.00
Tri-County	N																
	%																
WACOG	N	1	2						1			2		3			
	%	33	67				4.33		33			67	2.00	100			3.00
Yavapai	N		1						1					1			
	%		100				4.00		100				4.00	100			3.00
TOTALS	N	8	15	1	1	0		8	11	1	3	2		13	11	1	
	%	32	60	4	4	0	4.20	32	44	4	12	8	3.80	52	44	4	2.48

TABLE V
CORRELATION MATRIX

N=25 Unit 4	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		-.0147	.1255	.2439	.3052	.6637
Time Devoted to Unit			.0876	.1409	.0457	.1220
Sequence Taught				.0858	-.2504	-.1733
Teacher's Previous Unit Experience					-.0811	.2887
Teacher Attitude						.5151
Learner Attitude						

Significance level r=.396 @ .05

TABLE VI

Number and Percent of Lessons Omitted. Total Units Taught 26

UNIT # 4 , Doing Your Thing

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O														
	N														
Coconino	O					2	1	2							
	N														
DICE	O														
	N														
Mesa	O	1	1	2	3	4	3	5							
	N														
Pima	O														
	N														
Pinal	O					1									
	N														
Roosevelt	O														
	N														
Tri-County	O														
	N														
WACOP	O					1									
	N					1									
Yavapai	O							1							
	N														
TOTALS	O	1	1	2	3	8	4	8							
	N					1									
OMISSION RATE(%)	O	4	4	8	11	30	15	30							
	N					4									

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

DOING YOUR THING
(Teacher Comments)
GRADE 4

DICE	Liked unit-wants to do it again.
YAVAPAI	Good unit-wasn't able to give the time needed. Students were bored except last lessons other lessons need more activities.
PIMA	Lesson 1-too easy-some lessons were too long.
WACOP	Too much work for this age.
ROOSEVELT	Good unit-would help to have experience in building.
PINAL	Good unit-very adaptable to needs. More appropriate in high construction areas. Good unit.
COCONINO	Very good-easy to do and effective with students. Lessons too long.
MESA	Need list of places for field trips difficult to teach in sequence. Excellent unit. Very functional. Enjoyed it. Simplify teacher instructions. Vocabulary too dificult.

SUMMARY

This unit, Doing Your Thing, received a positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teacher attitude toward the unit was a positive 3.80. On the same scale the students' attitudes was an even more positive 4.20.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.48.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for wide-spread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of

this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

SECTION 5

Developing Your Potential

DEVELOPING YOUR POTENTIAL

GRADE 5

Unit Description

The purpose of this fifth grade unit is to teach the learner some techniques which can help him use more of his potential. The unit is designed to provide a situation in which it is socially acceptable for the student to rationally and systematically seek to identify his potentialities. The lessons provide a setting in which it is acceptable to acknowledge the positive aspects both of oneself and others. The unit incorporates many activities that help learners identify what they want to do with the positive aspects of their personalities and how these can be reflected in their daily activities.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 452 learners were exposed to the unit, Developing Your Potential; of these learners, 67 (15%)

were bilingual. In addition, 32% of the students were from minority backgrounds (6% American Indian, 3% Black, 22% Spanish Surname, and 1% Other) while the remaining 67% were Anglo students. (See Table I.)

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 4 (27%) of the classrooms, the teachers devoted 1-2 hours per week. Forty-seven percent (47%) of the teachers devoted less than one hour per week while the remaining 26% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g. taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However, a lesson may be given out of order to meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Ninety-three percent of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teacher attitude toward the unit Developing Your Potential was very positive (4.67 on a scale where 5 was most positive and 1 most negative) while the students' attitude was a positive 4.13 on the same scale. The teachers perceived this unit to be moderately effective 2.50 (on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

1. Perceived Unit Effectiveness and Sequence Taught
2. Perccived Unit Effectiveness and Teacher Attitude

Teachers that judged the unit most effective tended to teach the unit in sequence.

F. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

DEVELOPING YOUR POTENTIAL
(Teacher Comments)
GRADE 5

DICE	Very good unit.
COCONINO	Very good-will definitely use it next year in the curriculum.
COCHISE	Nothing wrong with it. Excellent unit. Had to break lessons into smaller units. Felt that unit is very good in instilling positive self-image in students.
PIMA	Excellent. Very good. Love things like this-wish to have in September.
TRI-COUNTY	No comments.
PINAL	No comment.
YAVAPAI	Items 2 and 7 in pre-test were ambiguous to kids. Well organized. Instructional procedures need to be more precise.

SUMMARY

This unit, Developing Your Potential, received a positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teachers' attitude toward the unit was a very positive 4.67. On the same scale the students' attitude was a positive 4.13.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.50.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in

the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

TABLE I

UNIT 05

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise	69	64	19(14%)	0(0%)	5(4%)	44(33%)	79(59%)	5(4%)	133
Coconino	43	61	27(26%)	27(26%)	9(9%)	11(10%)	57(55%)	0(0%)	104
DICE	16	17	1(3%)	0(0%)	0(0%)	1(3%)	32(97%)	0(0%)	33
Mesa									
Pima	34	46	7(9%)	1(1%)	0(0%)	8(10%)	71(89%)	0(0%)	80
Pinal	11	14	0(0%)	0(0%)	0(0%)	19(76%)	6(24%)	0(0%)	25
Roosevelt									
Tri-County	23	28	13(25%)	0(0%)	0(0%)	17(33%)	34(67%)	0(0%)	51
WACOP									
Yavapai	14	12	0(0%)	0(0%)	0(0%)	1(4%)	25(96%)	0(0%)	26
Total	210	242	67	28	14	101	304	5	452
Percent			15%	6%	3%	22%	67%	1%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 05 Developing Your Potential

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise	3	75	1	25						
Coconino	1	33	2	67						
DICE			1	100						
Mesa										
Pima	1	33			1	33	1	33		
Pinal					1	100				
Roosevelt										
Tri-County	1	50					1	50		
WACOP										
Yavapai	1	100								
TOTALS	7	47	4	27	2	13	2	13		

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 05 Developing Your Potential

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise	1	25	2	50	1	25
Coconino			3	100		
Dice			1	100		
Mesa						
Pima	3	100				
Pinal			1	100		
Roosevelt						
Tri-County	1	50	1	50		
WACOP						
Yavapai			1	100		
TOTAL	5	33	9	60	1	7

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 05 Developing Your Potential

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Casa Linda	N	2	1					2	1					3			
	%	67	33				4.67	67	33				4.67	100			3.00
Cochise	N	1	3					2	2								
	%	25	75				4.25	50	50				4.50				
DICE	N		1					1						1			
	%		100				4.00	100					5.00	100			3.00
Mesa	N																
	%																
Pima	N	1	1	1				3						3			
	%	33	33	33			4.00	100					5.00	100			3.00
Pinal	N			1					1						1		
	%			100			3.00		100				4.00		100		2.00
Roosevelt	N																
	%																
Tri-County	N		2					1	1					1	1		
	%		100				4.00	50	50				4.50	50	50		2.50
WACC	N																
	%																
Yavapai	N		1					1						1			
	%		100				4.00	100					5.00	100			3.00
TOTALS	N	4	9	2				10	5					2	2		
	%	27	60	13			4.13	67	33				4.67	50	50		2.50

TABLE V
CORRELATION MATRIX

N=15 Unit 5	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		.2459	.5433	-.2365	.5330	.3739
Time Devoted to Unit			.4668	.1600	-.0444	.2165
Sequence Taught				-.1596	.3288	-.1003
Teacher's Previous Unit Experience					-.2773	-.2326
Teacher Attitude						.3813
Learner Attitude						

Significance level r=.514 @ .05

APPENDIX I

Non-Significant Data

TABLE VI

Number and Percent of Lessons Omitted. Total Units Taught 18

UNIT # 5 , Developing Your Potential

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O		1	1	1	1		1	1						
	N														
Coconino	O				1										
	N														
DICE	O														
	N														
Mesa	O														
	N														
Pima	O								1						
	N														
Pinal	O														
	N														
Roosevelt	O														
	N														
Tri-County	O														
	N														
WACOP	O														
	N														
Yavapai	O														
	N														
TOTALS	O		1	1	2	1		1	2						
	N														
OMISSION RATE(%)	O		5	5	11	5		5	11						
	N	0	0	0	0	0	0	0	0						

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 6

Future Me

FUTURE ME

GRADE 5

Unit Description

The purpose of this fifth grade unit is to develop a greater awareness of careers and their specific requirements for occupational success. A major emphasis is placed on the learner's self-understanding, as well as the realization that individuals differ in many ways. This unit emphasizes that decisions and actions in the present will have an effect in the future, thus bringing a sense of meaningfulness to career planning. A final application of these concepts occurs when the learners compile their information and identify occupations which best suit their abilities, interests and preferences at this time in their lives. Individuals can raise their chances of success by understanding themselves and planning wisely. The unit also emphasizes that some unforeseen and uncontrolled event may cause the learners to alter their plans at any time during their lives.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 223 learners were exposed to the unit, Future Me; of these learners, 188 (19%) were bilingual. In addition, 30% of the students were from minority backgrounds (1% American Indian, 1% Black, 27% Spanish Surname, and 1% other) while the remaining 70% were Anglo students. (See Table I.)

B. Time Devoted To Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 6 (67%) of the classrooms, the teachers devoted 1-2 hours per week. The remaining 33% devoted more then 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g. taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However, a lesson may be given out of order to meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Eighty-nine percent of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teachers' attitude toward the unit Future Me was positive (4.00 on a scale where 5 was most positive and 1 most negative) while the students' attitude was "No Opinion" response of 3.33 on the same scale. The teachers perceived this unit to be moderately effective 2.44 (on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

1. Perceived Unit Effectiveness and Teacher Attitude
2. Time Devoted to Unit and Learner Attitude
3. Teacher Attitude and Learner Attitude
4. Perceived Unit Effectiveness and Learner Attitude

The more time that was devoted to the teaching of the unit influenced a more positive Learner Attitude.

F. Number and Percent of Lessons Omitted

Examining Table VI we see that a very high percentage of lessons (11-14) were omitted. However, the number of negative remarks is few (1 each). The conclusion that appears obvious is that there wasn't enough time to finish the last lessons of the unit.

G. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

FUTURE ME
(Teacher Comments)
GRADE 5

PINAL	Too involved-could be used in CORE.
PIMA	Difficult vocabulary.
TRI-COUNTY	No comment.
MESA	Didn't hold interest of upper middle class kids. Furnish dittos.
DICE	Like it-large vocabulary and simple worksheets. Helped hold the interest and helped all understand.
YAVAPAI	Too advanced in some ways. Fits well with Bread and Butterflys.

SUMMARY

This unit, Future Me, received a positive response from the teachers and a less than enthusiastic response from the students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teacher attitude toward the unit was a positive 4.00. On the same scale the student attitude was a "no opinion" response of 3.33.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.44.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of

this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

TABLE I

UNIT 06

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise									
Coconino									
DICE	18	19	0(0%)	0(0%)	0(0%)	2(5%)	35(95%)	0(0%)	37
Mesa	19	12	0(0%)	0(0%)	1(3%)	4(13%)	26(84%)	0(0%)	31
Pima	13	11	10(42%)	1(4%)	0(0%)	17(71%)	6(25%)	0(0%)	24
Pinal	14	16	17(57%)	0(0%)	1(3%)	16(53%)	13(44%)	0(0%)	30
Roosevelt	19	17	0(0%)	0(0%)	0(0%)	2(5%)	33(92%)	1(3%)	36
Tri-County	16	11	16(59%)	2(7%)	0(0%)	14(52%)	11(41%)	0(0%)	27
WACOP									
Yavapai	22	16	0(0%)	0(0%)	0(0%)	6(16%)	32(84%)	0(0%)	38
Total	121	102	43	3	2	61	156	1	223
Percent			19%	1%	1%	27%	70%	1%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 06 Future Me

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise										
Coconino										
DICE							1	100		
Mesa			2	100						
Pima			1	100						
Pinal			1	50	1	50				
Roosevelt										
Tri-County					1	100				
WACOP										
Yavapai			2	100						
TOTALS			6	67	2	22	1	11		

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 06 Future Me

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise						
Coconino						
Dice	1	100				
Mesa					1	100
Pima			1	100		
Pinal			2	100		
Roosevelt			1	100		
Tri-County	1	100				
WACOP						
Yavapai	1	50	1	50		
TOTAL	3	33	5	56	1	11

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 06 Future Me

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Coconino	N																
	%																
Cochise	N																
	%																
DICE	N	1						1						1			
	%	100					5.00	100					5.00	100			3.00
Mesa	N		1					1						1			
	%		100				4.00	100					5.00	100			3.00
Pima	N				1					1						1	
	%				100		2.00			100			3.00			100	1.00
Pinal	N	1			1			1			1			1	1		
	%	50			50		3.50	50			50		3.50	50	50		2.50
Roosevelt	N					1			1						1		
	%					100	1.00		100				4.00		100		2.00
Tri-County	N		1						1					1			
	%		100				4.00		100				4.00	100			3.00
MACOP	N																
	%																
Yavapai	N		1	1					2					1	1		
	%		50	50			3.50		100				4.00	50	50		2.50
TOTALS	N	2	3	1	2	1		3	4	1	1	0		5	3	1	
	%	22	33	11	22	11	3.33	33	44	11	11	0	4.00	56	33	11	2.44

TABLE V
CORRELATION MATRIX

N=9 Unit 6	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		.5263	.2867	-.0433	.6882	.8111
Time Devoted to Unit			.5448	-.0433	.5161	.6894
Sequence Taught				.1889		.3093
Teacher's Previous Unit Experience					.2834	-.0668
Teacher Attitude						.7071
Learner Attitude						

Significance level r=.666 @ .05

APPENDIX I

Non-Significant Data

TABLE VI

Number and Percent of Lessons Omitted. Total Units Taught 13

UNIT # 6 , Future Me

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O														
	N														
Coconino	O														
	N														
DICE	O														
	N														
Mesa	O												1	1	1
	N												1	1	1
Pima	O	1	1	1				1	1	1	1	1	1	1	1
	N														
Pinal	O		1	1	1					1	1	1	1	1	2
	N														
Roosevelt	O														
	N														
Tri-County	O														
	N														
WACOP	O														
	N														
Yavapai	O							1				1			
	N											1			
TOTALS	O	1	2	2	1			2	1	2	2	3	3	3	4
	N											1		1	1
OMISSION RATE(%)	O	8	15	15	8			15	8	15	15	23	23	23	31
	N											8	8	8	8

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 7

Following and Giving Directions

FOLLOWING AND GIVING DIRECTIONS GRADE 5

Unit Description

The primary intent of this fifth grade unit is to develop beginning competency in giving and following directions. The learners are made aware of the fact that many occupational activities involve giving and/or following directions. In conjunction with these, the learners are made aware of occupational settings and school tasks which involve directions. The lessons within the unit have been written to provide a total of six hours instructional time.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 1127 learners were exposed to the unit, Following and Giving Directions; of these learners 186 (16%)were bilingual. In addition, 30% of the students were from minority backgrounds (6% American Indian,

5% Black, 17% Spanish Surname, and 2% Other) while the remaining 70% were Anglo students. (See Table I.)

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 19 (44%) of the classrooms, the teachers devoted 1-2 hours per week. Twenty-eight percent (28%) of the teachers devoted less than one hour per week while the remaining 28% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g. taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However a lesson may be given out of order to meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Ninety-one percent of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teachers' attitude toward the unit Following and Giving Directions was very positive (4.37 on a scale where 5 was most positive and 1 most negative). The students' attitude was also a very positive 4.33 on the same scale. The teachers perceived this unit to be very effective 2.60 (on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

1. Perceived Unit Effectiveness and Time Devoted to Unit
2. Perceived Unit Effectiveness and Sequence Taught
3. Perceived Unit Effectiveness and Teacher Attitude
4. Perceived Unit Effectiveness and Learner Attitude
5. Teacher Attitude and Learner Attitude

Teachers that rated the unit most effective also tended to devote more time to the unit and also tended to teach it more in sequence.

F. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

FOLLOWING AND GIVING DIRECTIONS
(Teacher Comments)
GRADE 5

DICE	Lesson 5-not effective for my class. Could be used in 4-5-6 grades. Excellent unit.
WACOP	Enjoyed and learned from each lesson. Held children's interest better than other units I've seen.
ROOSEVELT	Good unit.
TRI-COUNTY	Lesson 3 eliminated-students weren't interested in setting a table. Good and important units for class. Students enjoyed lesson 4.
PIMA	Students liked it and looked forward to lessons. Difficult for slow readers. Excellent-no negative criticisms.
MESA	Lesson 4 should indeed be first. Lessons 1 and 5 were weakest.
PINAL	Eliminated role playing because students weren't mature enough.
YAVAPAI	Lesson on silently following directions needed.
COCONINO	Unit is good. Class profited from this. Students were enthusiastic.

PINAL — Role playing hard. Unit well done. Students enjoyed the activities. Excellent unit.

COCHISE — Class needed it-good unit. Appendix was really good. Students were enthusiastic. Excellent unit-easily adapted to various situations.

SUMMARY

This unit, Following and Giving Directions, received a very positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teacher attitude toward the unit was a positive 4.37. On the same scale the students' attitude was also a very positive 4.33.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.60.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

TABLE I

UNIT 07

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise	227	222	93(21%)	1(1%)	16(3%)	103(23%)	315(70%)	14(3%)	449
Coconino	28	47	10(13%)	32(43%)	5(7%)	6(8%)	31(41%)	1(1%)	75
DICE	17	16	2(6%)	0(0%)	0(0%)	3(9%)	30(91%)	0(0%)	33
Mesa	39	24	2(3%)	3(5%)	0(0%)	6(9%)	53(83%)	1(2%)	63
Pima	57	51	18(17%)	1(1%)	3(3%)	25(23%)	74(68%)	5(5%)	108
Pinal	48	55	34(33%)	9(9%)	4(4%)	25(24%)	64(62%)	1(1%)	103
Roosevelt	32	37	1(1%)	0(0%)	30(44%)	5(7%)	34(49%)	0(0%)	69
Tri-County	18	17	19(54%)	14(40%)	0(0%)	7(20%)	14(40%)	0(0%)	35
WACOP	43	40	4(5%)	2(3%)	1(1%)	4(5%)	75(90%)	1(1%)	83
Yavapai	55	54	3(3%)	4(4%)	0(0%)	6(5%)	99(91%)	0(0%)	109
Total	564	563	186	66	59	190	789	23	1127
Percent			16%	6%	5%	17%	70%	2%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 07 Following and Giving Directions

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise	9	56	6	38	1	6				
Coconino			2	67			1	33		
DICE					1	100				
Mesa			2	67	1	33				
Pima			2	50	2	50				
Pinal			4	80			1	20		
Roosevelt			1	50					1	50
Tri-County	1	50	1	50						
WACOP			1	50			1	50		
Yavapai	2	40			3	60				
TOTALS	12	28	19	44	8	19	3	7	1	2

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 07 Following and Giving Directions

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise	1	6	11	69	4	25
Coconino	2	67	1	33		
Dice			1	100		
Mesa	2	100				
Pima			4	100		
Pinal	1	20	4	80		
Roosevelt	1	33	2	67		
Tri-County			2	100		
WACOP	1	50	1	50		
Yavapai	4	80	1	20		
TOTAL	12	28	27	63	4	9

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 07 Following and Giving Directions

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Cocohino	N	2	1					2	1					2	1		
	%	67	33				4.67	67	33				4.67	67	33		2.67
Cochise	N	4	9	3				4	9	3				7	9		
	%	25	56	19			4.06	25	56	19			4.06	44	56		2.44
DICE	N		1						1					1			
	%		100				4.00		100				4.00	100			3.00
Mesa	N		2					1	1					2			
	%		100				4.00	50	50				4.50	100			3.00
Pima	N	1	3											2	2		
	%	25	75				4.25							50	50		2.50
Pinal	N	3	2					4	1					4	1		
	%	60	40				4.60	80	20				4.80	80	20		2.80
Roosevelt	N	1	2					2	1					3			
	%	33	67				4.33	67	33				4.67	100			3.00
Tri-County	N	2						1	1						2		
	%	100					5.00	50	50				4.50		100		2.00
ATCOP	N	2						2						2			
	%	100					5.00	100					5.00	100			3.00
Yavapai	N	2	3					1	4					3	2		
	%	40	60				4.40	20	80				4.20	60	40		2.60
TOTALS	N	17	23	3	0	0		19	21	3	0	0		26	17	0	
	%	40	53	7	0	0	4.33	44	49	7	0	0	4.37	60	40	0	2.60

TABLE V
CORRELATION MATRIX

N=43 Unit 7	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		.3913	.3408	-.1822	.5704	.3599
Time Devoted to Unit			.0855	-.1152	.2411	.1350
Sequence Taught				-.2288	.1981	.2268
Teacher's Previous Unit Experience					-.0609	-.1020
Teacher Attitude						.6855
Learner Attitude						

Significance level r=.301 @ .05

SUMMARY

This unit, Following and Giving Directions, received a very positive response from both the teachers and students involved in implementation on a scale where 5 was most positive and 1 most negative, the teacher attitude toward the unit was a positive 4.37. On the same scale the students' attitude was also a very positive 4.33.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.60.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

APPENDIX I

Non-Significant Data

TABLE VI

Number and Percent of Lessons Omitted. Total Units Taught 49

UNIT # 7 , Following and Giving Directions

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O	1	2	3	2	3									
	N														
Coconino	O														
	N														
DICE	O					1									
	N														
Mesa	O														
	N														
Pima	O														
	N														
Pinal	O					1									
	N					1									
Roosevelt	O														
	N														
Tri-County	O	1	1	1		1									
	N														
WACOP	O														
	N														
Yavapai	O														
	N														
TOTALS	O	2	3	4	2	6									
	N					1									
OMISSION RATE(%)	O	4	6	8	4	12									
	N					1									

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 8

Ideas: Things to Think About

IDEAS, THINGS TO THINK ABOUT

GRADE 6

Unit Description

The overall purpose of this sixth grade unit is to make the learner aware of some important ideas, and the sources of these same ideas. The unit stresses increasing self-knowledge through thought-provoking group and individual activities. Guidelines and highly structured worksheets are provided to direct learner inquiry into the nature and sources of ideas, how they change, and how they are expressed. Because of the personal and private nature of individual ideas, learners are assessed primarily on completion of activities, rather than on ideas or values expressed. Students participated in games, projects, and self-monitoring activities designed to further develop and strength the skills and habits of thinking about and acting on their ideas and values.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 393 learners were exposed to the unit, Ideas, Things to Think About; of these learners, 53 (13%) were bilingual. In addition, 27% of the students were from minority backgrounds (2% American Indian, 6% Black, 18% Spanish Surname, and 1% Other) while the remaining 73% were Anglo students. (See Table I.)

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 8 (62%) of the classrooms, the teachers devoted 1-2 hours per week. Twenty-three percent (23%) of the teachers devoted less than one hour per week while the remaining 15% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g., tuaght lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However, a lesson may be given out of order to

TABLE I

UNIT 08

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise	48	39	40(46%)	0(0%)	1(1%)	44(51%)	42(48%)	0(0%)	87
Coconino									
DICE									
Mesa	22	26	6(12%)	3(6%)	2(4%)	17(35%)	25(52%)	1(2%)	48
Pima	41	36	3(4%)	0(0%)	0(0%)	4(5%)	73(95%)	0(0%)	77
Pinal	27	26	17(32%)	3(6%)	7(13%)	32(60%)	11(21%)	0(0%)	53
Roosevelt									
Tri-County	24	68	8(9%)	37(40%)	1(1%)	34(37%)	20(22%)	0(0%)	92
WACOP									
Yavapai									
Total	162	195	74	43	11	131	171	1	357
Percent			21%	12%	3%	37%	48%	1%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 08 Ideas, Things To Think About

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise	2	50	1	25			1	25		
Coconino										
DICE										
Mesa					1	100				
Pima	2	67	1	33						
Pinal			1	50			1	50		
Roosevelt										
Tri-County			2	67			1	33		
WACOP										
Yavapai										
TOTALS	4	31	5	39	1	8	3	23		

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 08 Ideas; Things To Think About

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise	2	50			2	50
Coconino						
Dice						
Mesa	1	100				
Pima			2	67	1	33
Pinal	2	100				
Roosevelt						
Tri-County	2	67	1	33		
WACOP						
Yavapai						
TOTAL	7	54	3	23	3	23

meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Only 61% of the teachers taught the unit in sequence or partial sequence, the remaining 39% did not teach the lessons in sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teachers' attitude toward the unit Ideas, Things to Think About was very positive (4.23 on a scale where 5 was most positive and 1 most negative) while the students' attitude was less positive at 3.85 on the same scale. The teachers perceived this unit to be very effective (2.54 on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 08 Ideas, Things To Think About

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Coconino	N																
	%																
Cochise	N	2	1		1			2	1		1			3		1	
	%	50	25		25		4.00	50	25		25		4.00	75		25	2.50
DICE	N																
	%																
Mesa	N				1							1				1	
	%				100		2.00					100	1.00			100	1.00
Pima	N		1	2					1	2				1	1	1	
	%		33	67			3.33		33	67			3.33	33	33	33	2.00
Pinal	N	1		1				1	1					2			
	%	50		50			4.00	50	50				4.50	100			3.00
Roosevelt	N																
	%																
Tri-County	N	1			2			1	2					2	1		
	%	33			67		3.00	33	67				4.33	67	33		2.67
WACOP	N																
	%																
Yavapai	N																
	%																
TOTALS	N	4	2	3	4	0		4	5	2	1	1		8	2	3	
	%	31	15	23	31	0	3.46	31	38	15	8	8	3.77	62	15	23	2.38

TABLE V
CORRELATION MATRIX

N-13 Unit 8	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		-.1157	.1363	-.3948	.6533	.0223
Time Devoted to Unit			.1380	-.0533	.0361	.1985
Sequence Taught				.1648	.3719	.5260
Teacher's Previous Unit Experience					-.1436	-.1231
Teacher Attitude						.4444
Learner Attitude						

Significance level r=.553 @ .05

Positive correlation was found between Perceived Unit Fffectiveness and Teacher Attitude. The teachers who felt the unit was effective in delivering its objectives also tended to like the overall structure and presentation of the unit.

F. Number and Percent of Lessons Omitted

Examining the Table VI and the comments we see that a high percentage of the teachers eliminated lessons 4-13. Of the teachers eliminating those lessons, a high percentage also had negative comments about the lessons. The main reason for rejection of the lessons was that the students were not interested in the lessons or the lessons were too difficult.

G. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

TABLE VI

Number and Percent of Lessons Omitted. Total Units Taught 20

UNIT # 8, Ideas, Things To Think About

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O			1	2	1	1	1	2	1	1	1	1	1	
	N														
Coconino	O														
	N														
DICE	O														
	N														
Mesa	O														
	N														
Pima	O		1	1	1	1	1	1	1	1	1	1	1	1	
	N														
Pinal	O														
	N														
Roosevelt	O														
	N														
Tri-County	O		1	1	1	1	2	2	2	2	2	2	2	1	
	N		1	1	1	1	2	2	2	2	2	2	2	1	
WACOP	O														
	N														
Yavapai	O			1	1	1	1	1	1	1	1	1	1	1	
	N														
TOTALS	O		2	3	4	4	5	5	6	5	5	5	5	4	
	N		1	1	1	1	2	2	2	2	2	2	2	1	
OMISSION RATE(%)	O		10	15	20	20	25	25	30	25	25	25	25	20	
	N		5	5	5	5	10	10	10	10	10	10	10	5	

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

IDEAS, THINGS TO THINK ABOUT
(Teacher Comments)
GRADE 6

MESA	Role playing and interviews are very good. Very poor attitude toward unit.
COCHISE	Not good for departmentalized situation. Students didn't like so much written work. Unit necessary for students this age. Need more time.
PIMA	No comment.
TRI-COUNTY	Students weren't interested so didn't present more than 1st lesson. More appropriate at 7th or 8th grade. Would use it again.
YAVAPAI	Too much paper needed. Could be at 5th grade. Bread and Butterflies much better so only did lessons 1 and 2.
PINAL	Lesson 7 best-lesson on autobiography and role playing excellent. Will use in Social Studies curriculum.

SUMMARY

This unit, Ideas, Things To Think About received a positive response from both the teachers and students involved in implementation on a scale where 5 was most positive and 1 most negative, the teacher attitude toward the unit was a very positive 4.23. On the same scale the student attitude was a positive 3.85.

The teachers were asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.54.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

SECTION 9

Skill Schemes

SKILL SCHEMES

GRADE 6

Unit Description

The primary purpose of this sixth grade unit is to develop learner skills in the areas of buying products, home improvement and maintenance. The first part of the unit provides experiences in identifying aspects to consider when buying products. The second section of the unit introduces mail order catalog buying and provides examples to assist in identifying misleading advertisements. The last section consists of lessons related to home improvements and maintenance. Overall, the unit is intended to provide experiences which may be useful to learners in their everyday lives.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 357 learners were exposed to the unit, Skill Schemes; of these learners, 74 (21% were bilingual. In addition, 53% of the students were from minority backgrounds (12% American Indian, 3% Black, 37% Spanish Surname, and 1% other) while the remaining 48% were Anglo students. (See Table I.)

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 5 (39%) of the classrooms, the teachers devoted 1-2 hours per week. Thirty-one percent (31%) of the teachers devoted less than one hour per week while the remaining 31% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g., taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

TABLE I

UNIT 09

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise	35	33	29(29%)	1(1%)	1(1%)	20(29%)	46(68%)	0(0%)	68
Coconino									
DICE	13	14	3(11%)	2(7%)	0(0%)	4(15%)	21(78%)	0(0%)	27
Mesa	88	99	15(8%)	4(2%)	1(1%)	25(13%)	156(83%)	1(1%)	187
Pima	12	7	3(16%)	0(0%)	0(0%)	3(16%)	16(84%)	0(0%)	19
Pinal									
Roosevelt	27	34	12(20%)	0(0%)	22(36%)	18(29%)	17(28%)	4(7%)	61
Tri-County									
WACOP									
Yavapai	14	17	0(0%)	1(3%)	0(0%)	1(3%)	29(94%)	0(0%)	31
Total	189	204	53	8	24	71	285	5	393
Percent			13%	2%	6%	18%	73%	1%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 09 Skill Schemes

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise	1	33	2	67						
Coconino										
DICE			1	100						
Mesa	1	20	2	40	2	40				
Pima	1	100								
Pinal										
Roosevelt			2	100						
Tri-County										
WACOP										
Yavapai			1	100						
TOTALS	3	23	8	62	2	15				

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 09 Skill Schemes

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise			1	33	2	67
Coconino						
Dice					1	100
Mesa	1	20	3	60	1	20
Pima	1	100				
Pinal						
Roosevelt			2	100		
Tri-County						
WACOP						
Yavapai					1	100
TOTAL	2	15	6	46	5	39

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However a lesson may be given out of order to meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Seventy-seven percent of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teachers' attitude toward the unit Skill Schemes was moderately positive (3.77 on a scale where 5 was most positive and 1 most negative) while the students' attitude was less positive at 3.45 on the same scale. The teachers perceived this unit to be moderately effective (2.38 on a scale where 3 was most positive and 1 was most negative).

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 09 Skill Schemes

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Cochise	N																
	%																
Coconino	N	1	1	1				1	2					2	1		
	%	33	33	33			4.00	33	67				4.33	67	33		2.67
DICE	N		1					1						1			
	%		100				4.00	100					5.00	100			3.00
Mesa	N		4	1				2	3					3	2		
	%		80	20			3.80	40	60				4.40	60	40		2.60
Pima	N		1					1						1			
	%		100				4.00	100					5.00	100			3.00
Pinal	N																
	%																
Roosevelt	N		2						2						2		
	%		100				4.00		100				4.00		100		2.00
Tri-County	N																
	%																
WACOG	N																
	%																
Yavapai	N			1							1				1		
	%			100			3.00				100		2.00		100		2.00
TOTALS	N	1	9	3	0	0	3.85	5	7	0	1	0	4.23	7	6	0	
	%	8	69	23	0	0		38	54	0	8	0		54	46	0	2.54

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

1. Perceived Unit Effectiveness and Teacher Attitude
2. Perceived Unit Effectiveness and Learner Attitude
3. Time Devoted to Unit and Sequence Taught
4. Teacher Attitude and Learner Attitude

F. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

TABLE V
CORRELATION MATRIX

N=13 Unit 9	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		.0948	-.0604	.1963	.8652	.6579
Time Devoted to Unit			.7590	.2782	-.1914	-.3041
Sequence Taught				.4193	-.1639	-.3732
Teacher's Previous Unit Experience					-.0829	-.1888
Teacher Attitude						.7666
Learner Attitude						

Significance level r=.553 @ .05

SKILL SCHEMES
(Teacher Comments)
GRADE 6

MESA	Too long-each lesson takes more time than suggested. Excellent-difficult for poor math students. Well planned and organized. Add lessons of consumer interest.
PIMA	No comment.
ROOSEVELT	No comment.
DICE	Excellent-good ideas could incorporate more items of consumer interest.
COCHISE	Good material-could use more.
YAVAPAI	Excellent unit-helps kids understand application of math. Only lessons 2 and 4 seem meaningful out of the consumer lessons (1-4). Math lessons not relevant to this age group.
PINAL	Too hard for 6th grade.

SUMMARY

This unit, Skill Schemes, received a positive response from both the teachers and students involved in implementation on a scale where 5 was most positive and 1 most negative, the teachers' attitude toward the unit was a moderately positive 3.77. On the same scale the students' attitude was also a moderately positive 3.46.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.38.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

APPENDIX I

Non-Significant Data

TABLE VI

Number and Percent of Lessons Omitted.

Total Units Taught 18

UNIT # 9 , Skill Schemes

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O		2	2	1	1	1	1	1	1	1				
	N														
Coconino	O														
	N														
DICE	O														
	N														
Mesa	O		1	1	3	2	2	2	4	2	3	3			
	N								1						
Pima	O														
	N														
Pinal	O	1	1	1	1	1	1	1	1	1	1	1			
	N	1	1	1	1	1	1	1	1	1	1	1			
Roosevelt	O														
	N														
Tri-County	O														
	N														
WACOP	O														
	N														
Yavapai	O	1	1	2	1	1	1	1	1	1	1	2			
	N	1		1	1	1	1	1	1	1	1	1			
TOTALS	O	2	5	6	6	5	6	5	8	5	7	6			
	N	2	1	2	2	2	2	2	3	2	2	2			
OMISSION RATE(%)	O	11	28	33	33	28	33	28	44	28	39	33			
	N	11	5	11	11	11	11	11	16	11	11	11			

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 10

Look to Learning

LOOK TO LEARNING

GRADE 6

Unit Description

The primary intent of this sixth grade unit is to explore learning in its broadest sense. The learners are involved in activities dealing with what learning is, when they learn, and how they learn. The major goals and objectives deal with such topics as defining learning experiences both within and out of school. The last few lessons cover one goal dealing with expanding learning through the budgeting of time.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 787 learners were exposed to the unit, Look to Learning; of these learners, 91 (12%) were bilingual. In addition, 25% of the students were from minority backgrounds (5% American Indian, 4% Black, 15% Spanish Surname, and 1% Other) while the remaining 75% were Anglo students. (See Table I.)

TABLE I

UNIT 10

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise									
Coconino	101	75	46(26%)	36(20%)	5(3%)	24(14%)	110(62%)	1(1%)	176
DICE	35	30	3(5%)	0(0%)	0(0%)	6(9%)	59(91%)	0(0%)	65
Mesa	62	57	1(1%)	2(2%)	2(2%)	16(13%)	99(83%)	0(0%)	119
Pima	117	115	18(8%)	2(1%)	5(2%)	29(13%)	196(84%)	0(0%)	232
Pinal	37	39	21(28%)	1(1%)	0(0%)	43(57%)	32(42%)	0(0%)	76
Roosevelt	8	16	1(4%)	0(0%)	23(96%)	1(4%)	0(0%)	0(0%)	24
Tri-County									
WACOP	35	32	1(1%)	0(0%)	0(0%)	1(1%)	66(99%)	0(0%)	67
Yavapai	16	12	0(0%)	0(0%)	0(0%)	0(0%)	28(100%)	0(0%)	28
Total	411	376	91	41	35	120	590	1	787
Percent			12%	5%	4%	15%	75%	1%	
State Average				6%	4%	20%	69%	1%	

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 6 (33%) of the classrooms, the teachers devoted 1-2 hours per week. Twenty-two percent (22%) of the teachers devoted less than one hour per week while the remaining 45% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g., taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However, a lesson may be given out of order to meet the needs of the class, e.g., lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Seventy-two percent of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 10 Look To Learning

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise										
Coconino			1	25	3	75				
DICE							1	100		
Mesa			3	100						
Pima	3	75	1	25						
Pinal	1	33			1	33	1	33		
Roosevelt					1	100				
Tri-County										
WACOP			1	100						
Yavapai							1	100		
TOTALS	4	22	6	33	5	28	3	17		

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 10 Look to Learning

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise						
Coconino	1	25	3	75		
Dice	1	100				
Mesa	2	67			1	33
Pima	1	25			3	75
Pinal	2	67	1	33		
Roosevelt	1	100				
Tri-County						
WACOP					1	100
Yavapai			1	100		
TOTAL	8	44	5	28	5	28

Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teachers' attitude toward the unit Look to Learning was moderately positive (3.61 on a scale where 5 was most positive and 1 most negative) while the students' attitude was a less positive 3.50 on the same scale. The teachers perceived this unit to be somewhat effective at 2.17 (on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

1. Perceived Unit Effectiveness and Teacher Attitude
2. Perceived Unit Effectiveness and Learner Attitude

F. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 10 Look To Learning

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Coconino	N		3	1					2	1	1			1	3		
	%		75	25			3.75		50	25	25		3.25	25	75		2.25
Cochise	N																
	%																
DICE	N			1					1						1		
	%			100			3.00		100				4.00		100		2.00
Mesa	N		2		1				1	1	1				2	1	
	%		66.7		33.3		3.33		33.3	33.3	33.3		3.00		66.7	33.3	1.67
Pima	N		2	2				1	1	2				2	2		
	%		50	50			3.50	25	25	50			3.75	50	50		2.50
Pinal	N		2		1			1	2						3		
	%		66.7		33.3		3.33	33.3	66.7				4.33		100		2.00
Roosevelt	N			1						1					1		
	%			100			3.00			100			3.00		100		2.00
Tri-County	N																
	%																
WACOT	N	1							1					1			
	%	100					5.00		100				4.00	100			3.00
Yavapai	N			1					1						1		
	%			100			3.00		100				4.00		100		2.00
TOTALS	N	1	9	6	2		3.50	2	9	5	2		3.61	4	13	1	
	%	5.6	50	33.3	11.1			11.1	50	27.8	11.1			22.2	72.2	5.6	2.17

TABLE V
CORRELATION MATRIX

N=18 Unit 10	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		-.1286	.0667	.2659	.5606	.6547
Time Devoted to Unit			.4521	.0817	.1150	.1805
Sequence Taught				-.1140	.1749	.0436
Teacher's Previous Unit Experience					.3143	-.0746
Teacher Attitude						.3963
Learner Attitude						

Significance level r=.468 @ .05

LOOK TO LEARNING
(Teacher Comments)
GRADE 6

YAVAPAI	Generally favorable reaction from parents and students to content, duration and concerns of unit. Needs more intensive element.
DICE	Students enjoyed interviews in lesson 2.
PINAL	Students enjoyed budget game. Unit too long. It is a great unit.
ROOSEVELT	Lessons 2, 5 and 6 difficult. Students enjoyed lessons 3, 4 and 7.
COCONINO	Students enjoyed lessons 1, 2 and 3. Too long.
WACOP	The students enjoyed working with the lessons which used interviews and learning about various vocations.
PIMA	Perhaps guest speakers could replace worker interviews. A little below grade level would do well in a sociology class.
MESA	Bright students did best. Keeping track of activities at home didn't work only 15 of 60 forms were returned.

SUMMARY

This unit, Look to Learning, received a positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teacher attitude toward the unit was a positive 3.61. On the same scale the students' attitude was a positive 3.50.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated this unit to be on somewhat effective at 2.17.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

APPENDIX I

NON-SIGNIFICANT DATA

TABLE VI

Number and Percent of Lessons Omitted. Total Units Taught 17

UNIT # 10, Look to Learning

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O														
	N														
Coconino	O		1	1	1	1	1	1							
	N														
DICE	O														
	N			1				1							
Mesa	O		1	1	1	1	1	1							
	N														
Pima	O	1	1	2	1	1	1	1							
	N														
Pinal	O														
	N														
Roosevelt	O														
	N														
Tri-County	O														
	N														
WACOP	O			1											
	N														
Yavapai	O														
	N														
TOTALS	O	1	3	6	3	3	3	4							
	N			1				1							
OMISSION RATE(%)	O	6	18	35	18	18	18	24							
	N			6				6							

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 11

Careers Calling

CAREERS CALLING

GRADES 7 AND 8

Unit Description

Careers Calling is designed to provide learners with greater insight into the working world. This is accomplished by showing them that different occupations require different training and levels of competence, appeal to various personalities, and offer different benefits. Through firsthand contact with workers and guest speakers, the students gain an understanding of the contribution each worker makes to the welfare of society. Personality traits are viewed in relation to their compatibility with various working conditions and factors which determine success in an occupational choice. Knowledge of factors which improve competency after employment encourages the learner to adopt attitudes which may enhance success in a future career.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described in the following pages.

A. Student Demographic Information

A total of 571 learners were exposed to the unit, Careers Calling; of these learners, 42 (7%) were bilingual. In addition, 21% of the students were from minority backgrounds (3% American Indian, 9% Black, 8% Spanish Surname, and 1% Other) while the remaining 80% were Anglo students. (See Table I.)

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 3 (27%) of the classrooms, the teachers devoted 1-2 hours per week. Eighteen percent (18%) of the teachers devoted less than one hour per week while the remaining 54% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g., taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However, a lesson may be given out of order to meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. One hundred percent of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teacher attitude toward the unit Careers Calling was positive (4.09 on a scale where 5 was most positive and 1 most negative) while the students' attitude was also positive (3.82) on the same scale. The teachers perceived this unit to be somewhat effective (2.18 on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

1. Perceived Unit Effectiveness and Sequence Taught
2. Perceived Unit Effectiveness and Teacher Attitude
3. Teacher Attitude and Learner Attitude

Teachers which rated the unit most effective also tended to teach the unit in sequence. In addition, these

teachers also had a higher overall attitude toward the unit.

A high positive teacher attitude was positively correlated with the Learner Attitude.

F. Number and Percent of Lessons Omitted

Examining Table VI we see that a high percentage of teachers eliminated lesson one and also had negative comments about the lesson. One of the negative comments indicated that lesson one was too negative while the other stated that the unit was too long.

G. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

CAREERS CALLING
(Teacher Comments)
GRADES 7 AND 8

WACOP	Far too long and expensive a condensed version could be acceptable.
PIMA	Looks good. Good ideas. Too long-none of the lessons could be finished in one class period.
TRI-COUNTY	No comment.
ROOSEVELT	Activities too difficult-took too long to present. Some of the lessons too elementary.
MESA	No comment.
DICE	Good ideas and opportunities for students.
COCONINO	Too long and repetitious.

SUMMARY

This unit, Careers Calling, received a positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teachers' attitude toward the unit was a positive 4.09. On the same scale the students' attitude was also a positive 3.82.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated this unit to be only somewhat effective at 2.18.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

TABLE I

UNIT 11

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise									
Coconino	16	8	15(62%)	6(25%)	1(4%)	9(38%)	8(33%)	0(0%)	24
DICE	15	20	4(11%)	2(6%)	0(0%)	6(17%)	27(77%)	0(0%)	35
Mesa	68	52	2(2%)	4(3%)	0(0%)	0(0%)	115(96%)	1(1%)	120
Pima	106	101	10(5%)	4(2%)	3(1%)	18(9%)	182(88%)	0(0%)	207
Pinal									
Roosevelt	28	27	8(15%)	0(0%)	47(85%)	8(15%)	0(0%)	0(0%)	55
Tri-County	20	16	3(8%)	0(0%)	1(3%)	3(8%)	32(89%)	0(0%)	36
WACOP	46	48	0(0%)	0(0%)	0(0%)	0(0%)	94(100%)	0(0%)	94
Yavapai									
Total	299	272	42	16	52	44	458	1	571
Percent			7%	3%	9%	8%	80%	1%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 11 Careers Calling

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise										
Coconino					1	100				
DICE							1	100		
Mesa							2	100		
Pima	1	50							1	50
Pinal										
Roosevelt			2	100						
Tri-County							1	100		
WACOP	1	50	1	50						
Yavapai										
TOTALS	2	18	3	27	1	9	4	36	1	9

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 11 Careers Calling

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise						
Coconino			1	100		
Dice			1	100		
Mesa			2	100		
Pima	1	50	1	50		
Pinal						
Roosevelt	1	50	1	50		
Tri-County	1	100				
WACOP			2	100		
Yavapai						
TOTAL	3	27	8	73	0	

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 11 Careers Calling

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Coconino	N		1						1						1		
	%		100				4.00		100				4.00		100		2.00
Cochise	N																
	%																
DICE	N		1						1						1		
	%		100				4.00		100				4.00		100		2.00
Mesa	N			2			3.00		2						2		
	%			100					100				4.00		100		2.00
Pima	N	1		1				1	1					1	1		
	%	50		50			4.00	50	50				4.50	50	50		2.50
Pinal	N																
	%																
Roosevelt	N		2						2						2		
	%		100				4.00		100				4.00		100		2.00
Tri-County	N		1						1					1			
	%		100				4.00		100				4.00	100			3.00
YAVCO	N		2						2						2		
	%		100				4.00		100				4.00		100		2.00
Yavapai	N																
	%																
TOTALS	N	1	7	3				1	10					2	9		
	%	9.1	63.6	27.3			3.82	9.1	90.9				4.09	18.2	81.8		2.18

TABLE V
CORRELATION MATRIX

N=11 Unit 11	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		.5720	.7698	--	.6708	.5590
Time Devoted to Unit			.3538	--	.5043	.2193
Sequence Taught				--	.5164	.5487
Teacher's Previous Unit Experience					--	--
Teacher Attitude						.6500
Learner Attitude						

Significance level r=.602 @ .05

Table VI

Number and Percent of Lessons Omitted. Total Units Taught 11

UNIT # 11, Carrers Calling

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O														
	N														
Coconino	O														
	N														
DICE	O						1								
	N														
Mesa	O														
	N														
Pima	O	1	1	1			1	1	1	1	1				
	N														
Pinal	O														
	N														
Roosevelt	O	1													
	N	1													
Tri-County	O									1	1				
	N														
WACOP	O	1		1	1										
	N	1		1	1										
Yavapai	O														
	N														
TOTALS	O	3	1	2	1		2	1	1	2	2				
	N	2		1	1										
OMISSION RATE(%)	O	23	8	15	8		15	8	8	15	15				
	N	15		8	8										

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 12

Then and Now

THEN AND NOW

GRADES 7 AND 8

Unit Description

The purpose of this 7-8th grade unit is to illustrate how the demands and functions of society have produced significant differences in the life-styles of two historical periods, the 1620's and the 1970's. Five life-style components for the Spanish, five for the Indian tribes living in the Southwest, and five for the New England colonists are examined to show the interdependent activities of family members providing for their needs. An analysis of the later period reveals the complex nature of society. Again, five components of life-style are examined to show interdependency. These complexities are illustrated by the effects that assembly line production, division of labor, and worker performance have on a person's life-style. Finally, the life-style activities of the two periods will be compared to show what significant changes have taken place.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 816 learners were exposed to the unit, Then and Now; of these learners, 90 (11%) were bilingual. In addition, 37% of the students were from minority backgrounds (4% American Indian, 19% Black, 13% Spanish Surname, and 1% Other) while the remaining 64% were Anglo students. (See Table I.)

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. In 3 (20%) of the classrooms, the teachers devoted less than one hour per week while 60% devoted more than two hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g. taught 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However, a lesson may be given out of order to meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Only 47% of the teachers taught the unit in sequence or partial sequence, the remaining 53% used no sequence in teaching the lessons.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teachers' attitude toward the unit Then and Now was positive (4.00 on a scale where 5 was most positive and 1 most negative) while the students' attitude was also a positive 3.80 on the same scale. The teachers perceived this unit to be moderately effective (2.47 on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

Positive correlations were found between the following variables:

1. Perceived Unit Effectiveness and Time Devoted to Unit
2. Perceived Unit Effectiveness and Teacher Attitude
3. Perceived Unit Effectiveness and Learner Attitude

4. Teacher's Previous Unit Experience and Teacher Attitude

5. Teacher Attitude and Learner Attitude

Those teachers that rated the unit most effective tended to devote more time to the unit. In addition a high perceived effectiveness of the unit tended to influence a high teacher attitude and a high learner attitude.

Teachers with previous unit experience also tended to have a more positive attitude toward the unit. In addition student attitude was positively correlated with the teacher's attitude.

F. Number and Percent of Lessons Omitted

Examining Table VI and the comments, it is noted that the high omission rate is due mainly to lack of time or the concept had already been taught. The teachers used only the lessons relevant to what was to be covered in the class or grade level. It is interesting to note that the unit was completed in several English classes. The negative comments criticized the scope of the lessons as being too broad.

G. Teacher Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

THEN AND NOW
(Teacher Comments)
GRADES 7 and 8

DICE	Each lesson depends on completion of previous lesson--thus it is difficult to pick and choose parts. Aides, introduction and assessment very helpful.
PIMA	Excellent instructional guides. Assessment procedures very good.
YAVAPAI	Liked unit.
TRI-COUNTY	A little difficult but students seemed to enjoy it.
ROOSEVELT	Very good and relevant to students and areas students are familiar with. Not enough resource material making it difficult to maintain interest.
MESA	Would prefer a guide rather than a concentrated unit.
PINAL	Needs to be condensed. Excellent unit--students enjoyed it and referred back to it throughout the year.

SUMMARY

This unit, Then and Now, received a positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teacher attitude toward the unit was a positive 4.00. On the same scale the student attitude was also a positive 3.80.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated the effectiveness of this unit a moderately positive 2.47.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

TABLE I

UNIT 12

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise									
Coconino									
DICE	72	68	12(9%)	0(0%)	2(1%)	19(14%)	119(85%)	0(0%)	140
Mesa	65	74	18(13%)	5(4%)	1(1%)	17(12%)	115(83%)	1(1%)	139
Pima	75	68	7(5%)	1(1%)	1(1%)	16(11%)	123(86%)	2(1%)	143
Pinal	40	35	19(25%)	10(13%)	21(28%)	9(12%)	34(45%)	1(1%)	75
Roosevelt	79	81	4(2%)	0(0%)	133(83%)	25(16%)	2(1%)	0(0%)	160
Tri-County	19	12	26(84%)	13(42%)	0(0%)	11(35%)	7(23%)	0(0%)	31
WACOP									
Yavapai	69	59	4(3%)	2(2%)	1(1%)	6(5%)	119(93%)	0(0%)	128
Total	419	397	90	31	159	103	519	4	816
Percent			11%	4%	19%	13%	64%	1%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 12 Then and Now

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise										
Coconino										
DICE	2	100								
Mesa					2	100				
Pima										
Pinal							1	100		
Roosevelt			1	33					2	67
Tri-County			1	50			1	50		
WACOP										
Yavapai			1	50					1	50
TOTALS	3	20	3	20	2	13	4	27	3	20

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 12 Then & Now

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise						
Coconino						
Dice					2	100
Mesa	1	33			2	67
Pima						
Pinal					1	100
Roosevelt	2	100				
Tri-County			1	50	1	50
WACOP						
Yavapai	1	50	1	50		
TOTAL	4	27	3	20	8	53

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 12 Then and Now

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Coconino	N																
	%																
Cochise	N																
	%																
DICE	N		2						2						2		
	%		100				4.00		100				4.00		100		2.00
Mesa	N			2						2					2		
	%			100			3.00			100			3.00		100		2.00
Pima	N		1	2				1		2				2		1	
	%		33.3	66.7			3.33	33.3		66.7			3.67	66.7		33.3	2.33
Pinal	N		1					1						1			
	%		100				4.00	100					5.00	100			3.00
Roosevelt	N		2		1				3					2	1		
	%		66.7		33.3		3.33		100				4.00	66.7	33.3		2.67
Tri-County	N	2						1	1					2			
	%	100					5.00	50	50				4.50	100			3.00
WACOG	N																
	%																
Yavapai	N	1	1					1	1					1	1		
	%	50	50				4.50	50	50				4.50	50	50		2.50
TOTALS	N	3	7	4	1			4	7	4				8	6	1	
	%	20	46.7	26.7	6.7		3.80	26.7	46.7	26.7			4.00	53.3	40	6.7	2.47

TABLE V
CORRELATION MATRIX

N=15 Unit 12	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		.7910	.3621	.2961	.5906	.5698
Time Devoted to Unit			.4495	.1548	.2543	.2899
Sequence Taught				.1072	.2138	.0188
Teacher's Previous Unit Experience					.5371	.3768
Teacher Attitude						.6578
Learner Attitude						

Significance level r=.514 @ .05

Table VI

Number and Percent of Lessons Omitted. Total Units Taught 14

UNIT # 12, Then and Now

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O														
	N														
Coconino	O														
	N														
DICE	O	1	1	1	1		1								
	N	1	1	1	1		1								
Mesa	O	1													
	N	1													
Pima	O		1												
	N														
Pinal	O		1		1	2	2								
	N														
Roosevelt	O			1	1	1	1								
	N														
Tri-County	O	1	1	1	1	1	1								
	N														
WACOP	O														
	N														
Yavapai	O	1	2	1	1	1	1								
	N														
TOTALS	O	4	6	4	5	5	6								
	N	2	1	1	1		1								
OMISSION RATE(%)	O	28	43	28	36	36	43								
	N	14	7	7	7	0	7								

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught

SECTION 13

Composition of Business Letters

COMPOSITION OF BUSINESS LETTERS

GRADES 7 AND 8

Unit Description

The purpose of this unit is to help the student write letters of different types for different reasons. Specifically, the student will learn to compose and prepare a friendly letter, a business letter making a request, and a business letter giving information.

IMPLEMENTATION RESULTS

The data in this report was collected from the teachers, learners and projects described below.

A. Student Demographic Information

A total of 578 learners were exposed to the unit, Composition of Business Letters; of these learners, 33 (6%) were bilingual. In addition, 12% of the students were from minority backgrounds (2% American Indian, and 10% Spanish Surname) while the remaining 88% were Anglo students. (See Table I.)

B. Time Devoted to Teaching Unit

The teachers were asked to indicate how many hours per week they devoted to the teaching of the unit. Twenty percent (20%) of the teachers devoted less than one hour per week while the remaining 80% devoted more than 2 hours per week to the lesson. (See Table II.)

C. Sequence of Lessons Taught

Table III shows the number and percent of teachers that taught the unit in sequence, partial sequence or not in sequence. In sequence is defined as teaching each lesson in the order presented in the unit. Included also are those teachers that taught the unit as written but may have left out one or two lessons, e.g. taught lessons 1, 2, 3, 6, 8, 9, 10 and left out 4, 5, and 7.

Partial sequence is defined as meaning that basically the lessons were taught in the order presented. However a lesson may be given out of order to meet the needs of the class, e.g. lesson 6 may have been taught first followed by lessons 1, 2, 3, 8, 9, 10.

No sequence is defined to be those instances where only one lesson was taught or where the teacher picked out only various parts of the unit according to the needs of the class. Eighty percent of the teachers taught the unit in sequence or partial sequence.

D. Unit Effectiveness

Table IV presents the mean Student Attitude, mean Teacher Attitude and mean teacher's perceived Unit Effectiveness by project and overall. This information was compared with the corresponding means of the other units used in the implementation to determine the final unit effectiveness ranking. The teachers' attitude toward the unit Composition of Business Letters was moderately positive (3.40 on a scale where 5 was most positive and 1 most negative) while the students' attitude was also a moderately positive 3.50 on the same scale. The teachers perceived this unit to be only somewhat effective (2.20 on a scale where 3 was most positive and 1 was most negative).

E. Correlation

Table V below presents the Pearson product moment coefficients of correlation for the listed variables.

Significant correlations were found between the following variables:

1. Perceived Unit Effectiveness and Time Devoted to Unit
2. Perceived Unit Effectiveness and Sequence Taught
3. Perceived Unit Effectiveness and Teacher Attitude
4. Time Devoted to Unit and Teacher Attitude
5. Sequence Taught and Teacher Attitude

The teachers that perceived the unit to be most effective and otherwise had a positive attitude toward the unit also tended to devote more time to the unit and were more likely to teach the unit in sequence.

F. Teachers Comments

The teachers were asked to comment on various aspects of the units. Following are the major comments made by the teachers at each implementation site. In some cases no comments were made by the teachers involved in implementation.

COMPOSITION OF BUSINESS LETTERS
(Teacher Comments)
GRADES 7 AND 8

PINAL	No comment.
PIMA	Good unit.
TRI-COUNTY	Too long-needs to be presented as a need for a particular letter arises.
MESA	Looks good. Needs an instructor sheet to include examples of types of letters.
DICE	Good students did well-others didn't participate.
WACOP	Need preliminary practice first. Already have information in texts. Students enjoyed unit.

SUMMARY

This unit, Composition of Business Letters, received a positive response from both the teachers and students involved in implementation. On a scale where 5 was most positive and 1 most negative, the teacher attitude toward the unit was a moderately positive 3.40. On the same scale the students' attitude was also moderately positive at 3.50.

The teacher was asked to indicate how effective the learning activities were in helping meet the performance objective stated. On a scale where 3 was most positive, the teachers rated this unit to be only somewhat effective at 2.20.

RECOMMENDATIONS

This unit was field tested during the 1973-74 school year and implemented during the 1974-75 school year. In both years the unit did very well and is ready for widespread distribution.

It is recommended, however, that an attachment of teachers' comments be made available to future teachers of this unit so that the ideas and recommendations generated in the field test and implementation can be used to help teachers successfully utilize the unit in their classrooms.

TABLE I

UNIT 13

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION						
PROJECT	M	F	BILINGUAL STUDENT	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Cochise									
Coconino									
DICE	13	20	5(15%)	2(6%)	0(0%)	6(18%)	25(76%)	0(0%)	33
Mesa	74	65	20(14%)	5(4%)	0(0%)	16(12%)	117(84%)	1(1%)	139
Pima									
Pinal									
Roosevelt									
Tri-County	24	6	2(7%)	1(3%)	0(0%)	19(63%)	10(33%)	0(0%)	30
WACOP	135	166	6(2%)	1(1%)	0(0%)	2(1%)	298(99%)	0(0%)	301
Yavapai	36	39	0(0%)	2(3%)	0(0%)	12(16%)	61(81%)	0(0%)	75
Total	282	296	33	11	0	55	511	1	578
Percent			6%	2%	0%	10%	88%	.1%	
State Average				6%	4%	20%	69%	1%	

TABLE II

Number and percent of teachers by number of hours devoted to unit each week.

UNIT 13 Composition of Business Letters

PROJECTS	TIME DEVOTED TO THE UNIT EACH WEEK									
	Less 1 Hr.		1-2 Hrs.		2-3 Hrs.		3-5 Hrs.		5+ Hrs.	
	N	%	N	%	N	%	N	%	N	%
Cochise										
Coconino										
DICE							1	100		
Mesa							2	100		
Pima										
Pinal										
Roosevelt										
Tri-County							1	100		
WACOP	2	50			2	50				
Yavapai							2	100		
TOTALS	2	20			2	20	6	60		

TABLE III

Number and Percent of Teachers by Sequence in which They Taught the Unit

Unit 13 Composition of Business Letters

PROJECT	SEQUENCE OF LESSONS					
	IN SEQUENCE		PARTIAL SEQ.		NO SEQUENCE	
	N	%	N	%	N	%
Cochise						
Coconino						
Dice	1	100				
Mesa			2	100		
Pima						
Pinal						
Roosevelt						
Tri-County			1	100		
WACOP	2	50			2	50
Yavapai			2	100		
TOTAL	3	30	5	50	2	20

TABLE IV

Student Attitude by Class, Teacher Attitude and Teacher Perception of Unit Effectiveness

Unit 13 Composition of Business Letters

Projects		Student Attitude by Class					Mean	Teacher Attitude					Mean	Perceived Unit Effectiveness			Mean
		5	4	3	2	1		5	4	3	2	1		3	2	1	
Coconino	N																
	%																
Cochise	N																
	%																
DICE	N				1				1					1			
	%				100		2.00		100				4.00	100			3.00
Mesa	N		2						2						2		
	%		100				4.00		100				4.00		100		2.00
Pima	N																
	%																
Pinal	N																
	%																
Roosevelt	N																
	%																
Tri-County	N			1					1						1		
	%			100			3.00		100				4.00		100		2.00
MACOG	N		2	2					2			2		2		2	
	%		50	50			3.50		50			50	2.50	50		50	2.00
Yavapai	N		2						2					1	1		
	%		100				4.00		100				4.00	50	50		2.50
TOTALS	N	6	3	1					8			2		4	4	2	
	%	60	30	10			3.50		80			20	3.40	40	40	20	2.20

TABLE V
CORRELATION MATRIX

N=10 Unit 13	Perceived Unit Effectiveness	Time Devoted to Unit	Sequence Taught	Teacher's Previous Unit Experience	Teacher Attitude	Learner Attitude
Perceived Unit Effectiveness		.6417	.9163	--	.8018	.1992
Time Devoted to Unit			.5880	--	.9432	.2557
Sequence Taught				--	.7857	.1065
Teacher's Previous Unit Experience					--	--
Teacher Attitude						.3727
Learner Attitude						

Significance level r=.632 @ .05

APPENDIX I

Non-Significant Data

TABLE VI

Number and Percent of Lessons Omitted. Total Units Taught 10

UNIT # 13, Composition of Business Letters

PROJECTS	Lesson #	UNIT LESSONS OMITTED													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cochise	O														
	N														
Coconino	O														
	N														
DICE	O														
	N														
Mesa	O		1	1											
	N		1	1											
Pima	O														
	N														
Pinal	O	1													
	N														
Roosevelt	O														
	N														
Tri-County	O		1												
	N														
WACOP	O	1	1	1											
	N	1	1	1											
Yavapai	O	1													
	N														
TOTALS	O	3	3	2											
	N	1	2	2											
OMISSION RATE(%)	O	30	30	20											
	N	10	20	20											

O = Number of lessons omitted.
N = Number of lessons omitted with negative comments.

Omission Rate(%) = total lessons omitted/total units taught